

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/005580

A. CLASSIFICATION OF SUBJECT MATTER
 Int.Cl⁷ H01M4/58, C01B31/02, H01M4/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 Int.Cl⁷ H01M4/58, C01B31/02, H01M4/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2005
 Kokai Jitsuyo Shinan Koho 1971-2005 Toroku Jitsuyo Shinan Koho 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	*Relevant to claim No.
A	JP 7-320740 A (Kureha Chemical Industry Co., Ltd.), 08 December, 1995 (08.12.95), Full text & US 5587255 A & EP 613197 A1	1-11
A	JP 8-64207 A (Kureha Chemical Industry Co., Ltd.), 08 March, 1996 (08.03.96), Full text & US 5616436 A & EP 700105 A2	1-11
A	WO 02/83557 A1 (L.G. CHEM., LTD.), 24 October, 2002 (24.10.02), Full text & JP 2004-519408 A & EP 1296892 A1 & US 2003-147800 A1	1-11

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
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- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

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- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search
22 June, 2005 (22.06.05)Date of mailing of the international search report
12 July, 2005 (12.07.05)Name and mailing address of the ISA/
Japanese Patent Office

Authorized officer

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